

Ethical design

Towards socially sustainable digitalisation

FROM
THEORY TO
PRACTICE!



Designing an ethical digital world, part 2:

Ethical design – Towards socially sustainable digitalisation

Version 1.0

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Ethical digitalisation should be inclusive, take into account people's well-being, see technology as a collaborator rather than a replacement for people, recognise the need for social innovations as much as technological ones, and overall aim to help create good life in just societies in harmony with nature.

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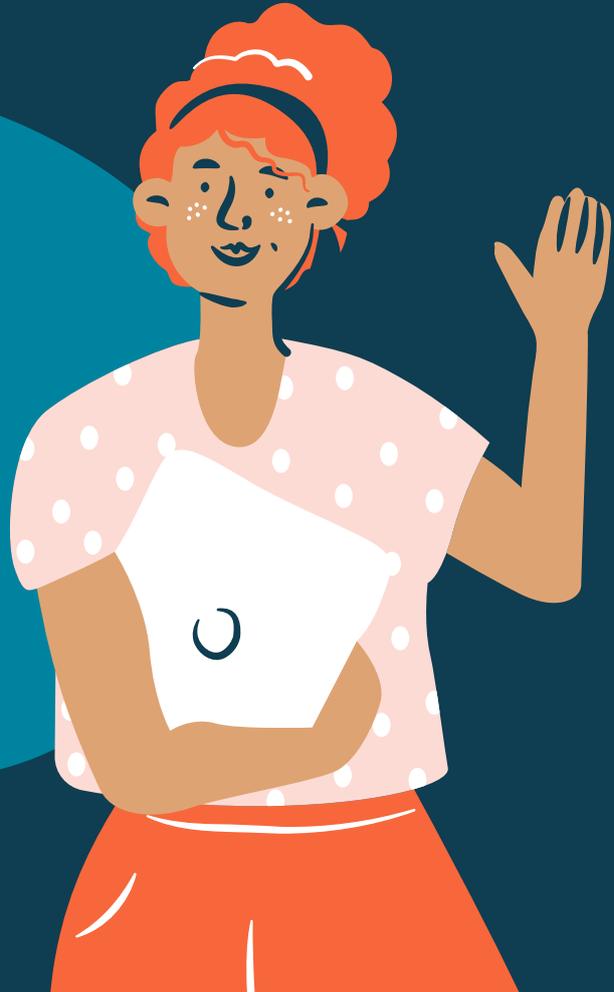
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Hello reader:

Why we created this booklet



The transformative promise of digitalisation is in the air. However, **we see that digitalisation has not yet fulfilled its promise in a way that would be socially sustainable.** Have you ever felt the same? With this booklet we invite you to join the discussion, action and change of a paradigm toward ethical design.

Digitalisation creates changes in our society and exponentially increases the pace of how information is created, transferred, and presented. Sometimes, it feels like the digitalisation that makes services seamless, eases social interaction, and increases processes' efficiency is such a powerful actor that one can only try to keep up with the pace and hope for the best.

We can do more than hope. Technology does not have the sole power to shape people's actions and experiences. People play an active role in steering technologies in directions they consider valuable.

We see that **digitalisation should be inclusive, take into account people's well-being, see technology as a collaborator rather than a replacement for people, recognise the need for social innovations as much as technological ones, and overall aim to help create good life in just societies in harmony with nature.** This is what we call ethical design, and believe it's a way toward socially sustainable digitalisation.



We consider environmental sustainability crucial, but here, we focus on people and social sustainability.

This booklet brings attention to digital services' ethical impact and supports you to design in a socially sustainable way. We hope to help you discuss the why and how of ethical digitalisation in your community. We also present tools and resources, such as a set of ethical design lenses and canvases for incorporating ethical thinking and action in one's own work and organisation.

We invite you to create an ethical digital world and by doing so reduce the digital divide rather than widen it!

Whom is this for?

designers

chief
technology
officers

product
owners

anyone in the tech
industry viewing
digitalisation
from an ethical
perspective



1

food for thought and encouragement for discussion and action related to ethical design

2

tips for all levels of design: from strategy- & vision-level design to user interface design

3

design lenses for ethical design

What you get

6

literature for further reading

5

directions regarding where to go after reading this booklet

4

ideas on how to use the lenses in practice

How we created this booklet

Ethics is different from natural & mathematical sciences. It is something that cannot be measured precisely, and it rarely has right or wrong answers.

We have approached the topic by reviewing a range of design lenses related to ethics, workshopped about ethical design, studied the pressing social issues of today's digitalisation, and gathered our project experiences. Still, **we stand on the shoulders of ancient philosophers as well as contemporary thinkers and scientists.** We admire, adapt

to, and have learned a lot from theories, frameworks, and projects, such as value-sensitive design, social construction of technology, self-determination theory (SDT), VIRT-EU, and the Digital Ethics Compass of the Danish Design Center. Based on our research, we created nine ethical design lenses.

In this booklet, we try to contribute humbly to design digital services that make the world better. However, we acknowledge that what is good might not be self-evident. The last 2500 years of philosophical thinking about ethics has not revealed an answer, so we give ourselves slack from trying to answer that comprehensively.



We challenge all design stakeholders to join the discussion of what 'good' means in ethical digitalisation and what kind of society we want to design.

What does 'ethical' mean in ethical design?



The way we talk about ethical products or ethical services easily lures us to think that 'being ethical' would be a clear, unambiguous phenomenon. That is not the case. Ethics is a normative approach. It does not describe what is. Rather, it states what ought to be. The exact content of the 'ought' varies, depending on various normative ethical bases.

In this booklet, we do not discuss in depth the normative ethical basis of ethical design but clarify our starting point: our idea of the 'ethical' in ethical design entails a limited bundle of rather universal moral obligations, such as promoting human rights and

emphasising the most vulnerable groups' needs. However, ethics is also a matter of practical wisdom: it is an art of finding in various contexts the most appropriate solutions for promoting good life in just institutions.

There is something we all can and should do: **let's be reflective and more aware of our conceptions of 'good' and 'ought' and 'just', and let's bring these conceptions to dialogue in design processes.**

The promise
of digitalisation
is not yet
fulfilled



Digital transformation has occurred quickly and had many positive effects, but it has not been grounded in ethics. It has created digital services that possibly have the opposite effect of creating a good life for many, particularly the most vulnerable in society, let alone future generations. The fast speed of digital development and the complex logic behind these services can also lead to people feeling left out from the promises of digitalisation and feeling like digital outsiders.

We know how convenient it is to order an Uber or get food via Wolt. These services are examples of smoothly designed digitalisation. However, taking a deeper look, reveals that to design only for the convenience of the primary user might have consequences for other stakeholders and society. The gig economy can be convenient for its primary users but at the same time

may result in freelancers feeling a loss of stability and safety nets compared to hired employees.

Projects in which new software and digital services are designed are often purposely focused. Questions such as “What is the minimum viable product of this service?” and “Who



are the primary users, and what are their needs?” can be important. However, such questions give us a narrow view. For example, “Move fast and break things,” Silicon Valley’s mantra, affects us all but does not consider the societal consequences. Also, traditional user-centred design mainly focuses on fulfilling the pragmatic and hedonic goals of primary user groups and aligning them with the service provider’s business goals to generate a profit. **We should move from the traditional way toward ethical design.**

As the gig economy example shows, the same technologies have different effects on different social groups. For the users, it is convenient services and for the freelancer, it is a way to make a living (through gig economy). For the traditional employees it might mean disruption in the way the whole field functions and difficulties adapting to new business models.

Power relations and bias

The design stakeholders sitting at decision-making tables are often experts in business, management, technology, and design. They are the stakeholders who negotiate what they consider important in their products and services. Their values are what is incorporated in the design.

Even if organisational structures and roles sometimes restrict what we can do, they do not take away our ethical agency: we are free to choose more or less ethically sound courses of action amidst design processes. Therefore, all the stakeholders in design processes are ethical agents and therefore responsible for the processes and their outcomes.

In human-centred design, the primary users and their needs are considered, as in the previous Uber example.

However, people who are indirectly affected or have special needs are often left out of the discussions and decision making, either on purpose or unconsciously. This bias leads to unequal power relations in the current way digitalisation is designed and created, and this inequality can hinder well-being at the individual and societal levels.

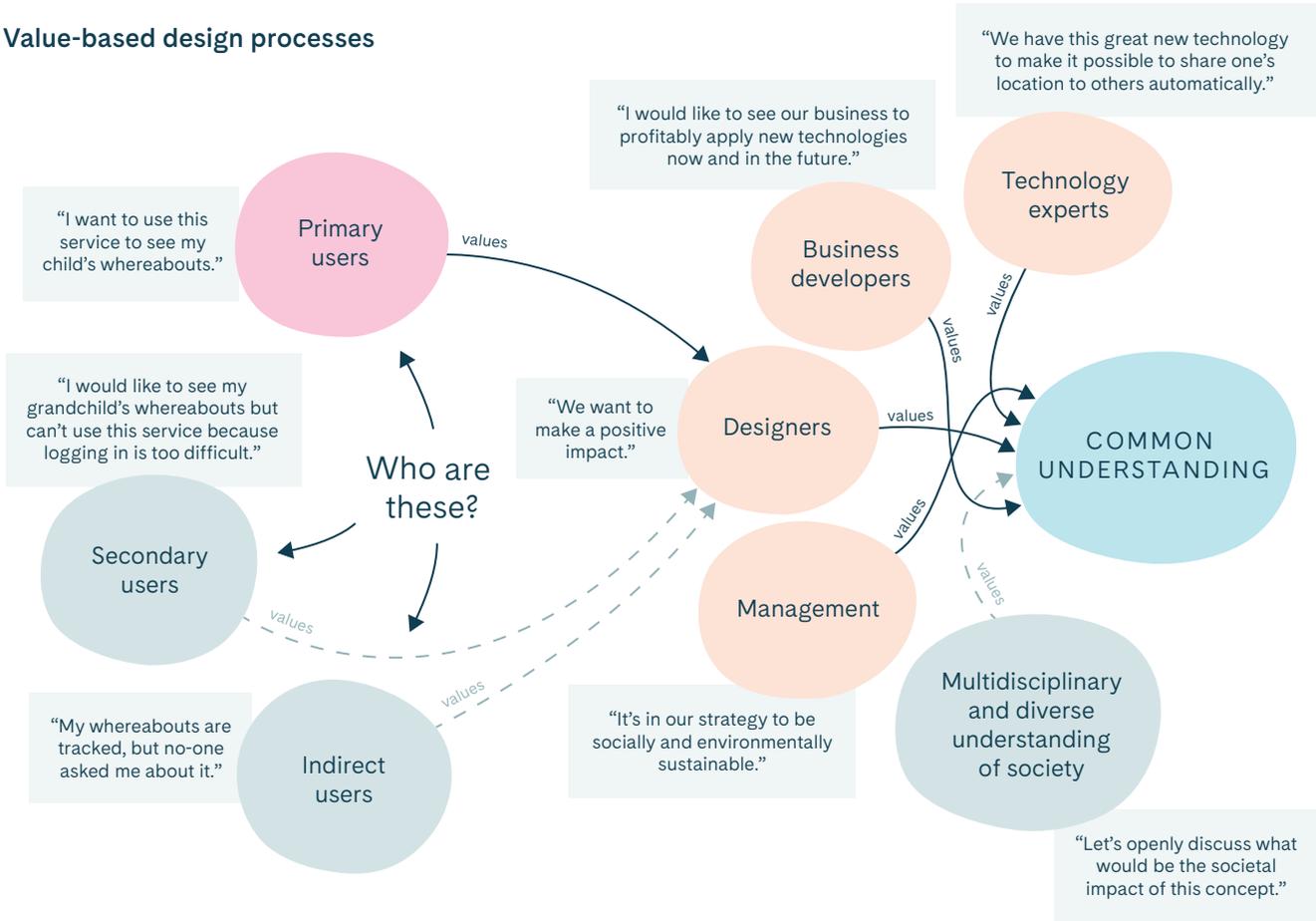
Concentrating on primary users is not enough when aiming for socially sustainable digitalisation. **We need to design digital services with a societal state of mind.**

Unequal power relations in the current way digitalisation is created, can hinder well-being at the individual and societal levels.

ON THE NEXT PAGE

Value-based design processes: varying values of stakeholders and the tensions between the values. Stakeholders observe how their own values are reflected in the design process and engage in critical conversations on what kind of values the solution or service should embody.

Value-based design processes



A gap between high-level actions and grassroots actions: the message gets lost

Many companies are including sustainability goals in their strategy. However, we have seen that management sometimes has the will to do so, but that will might not fully actualise in the sea of bureaucracy, tight resources, and vague goals related to ethics or lack of ethical capability in various parts of the organisation. Traditionally, key performance indicators (KPIs) guide the everyday work, and they are drawn from business goals, leaving wider societal thinking behind.

The mismatch between explicit statements and everyday ethical action can easily be perceived as whitewashing, such as when companies change their logo colours during Pride week without taking any action to support LGBTQIA+ communities.

Walking the talk

In addition to individual ethical skills, we need to pay attention to organisational structures that support and legitimise ethical action.

Suggestions for actualising high-level commitment:

- Turn ethical thinking into strategy
- Ethical KPIs
- Increase the level of ethical capability at all levels of the organisation



Ethical key performance indicators (KPIs)

- 1 Ethical evaluation of sales cases (as in Gofore)
- 2 How many clients have been offered ethical design services?
- 3 How many projects have undergone an ethical-impact evaluation?
- 4 An annual customer experience survey for minority groups (and following the change in the results)

An Example from History

An often used pre-digital-era example of ethics in design is a construction project in NYC: the city planner at the time, Robert Moses, constructed highway overpasses so low that they prevented tall vehicles, such as public transportation buses, using the highway without hitting the bridge.

This design stopped people who rode the bus from accessing certain beaches. In practice, this limitation affected people with lower socioeconomic status: poor people and minorities. It is unclear whether the reasons behind the design were racist values or a narrow-sighted design process, but it's clear that the impact of the design on society was very significant.

Design without an ethics focus can lead to unintended negative consequences

There are plenty of examples – past and present – of design preventing people participating in society physically and digitally.



Digital mishaps with a societal impact

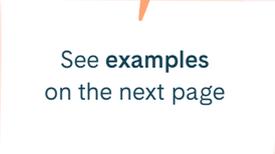
Design mishaps have happened throughout history and they still happen today. All of us can surely think of some examples of when a digital service made our lives more difficult. So let's make sure to do better in the future.

We also have positive examples from history. For example 10 years ago, no one talked about accessibility but today there are concrete actions and standards to make sure that digital services may reach the

highest AAA level. Accessibility is also included in both national and EU level legislation to guarantee equal access to digital services.

Another positive example is General Data Protection Regulation (GDPR) which was introduced into legislation to protect users' privacy and data collection rights. This example also has shown how there are various ways to design the access rights prompt. What are the default settings the user is asked to accept and how

are they communicated? Still, users might feel that there is a bigger trade off with usability when continuous prompting starts to feel irritating.



See **examples**
on the next page

A Finnish–French family returned to Finland and **were not able to make any arrangements without the digital ID** – applying for an apartment, daycare, or insurance. This inability left them feeling like second-class citizens. There are 450 000 citizens (over 16 yrs) in Finland without digital ID in use.

An aged person **was not able to use digital health services to schedule a Covid vaccination** as soon as the appointments became available.

A senior citizen noticed that his bank had started to charge an extra monthly fee for its services. After contacting the bank's customer service line, he found out that only the bank's mobile app users would not have to pay the extra charges. **Using the bank's desktop Web service, which he was fluent with, was not enough anymore.**

A family with English as their home language **was not able to sign their child up for an afterschool program**, not realising that it was to be done on the city website.

A time tracking system was used with 1st grade students. In addition, employees were forced to log their working hours with the same system. Each team used only one mobile phone. Signing in to work became impossible, and **employees felt that they were under surveillance.**

Amazon's recruiting **algorithm suggested an excess of white males for recruitment** because the data it had been provided was biased toward white males.

Consulting company Cambridge Analytica **collected users' Facebook data without consent** in order to do political advertising. Customised messages on several digital platforms were aimed at profiled user groups in order to affect their voting in the 2016 U.S. presidential elections.

A patient information system **causes more work for doctors, leaving them less time for patients.** Cases of missing patient data have also occurred, which can put lives at risk.

A senior citizen's Internet provider informed them that they weren't sending bills through email anymore. He **had difficulty setting up the payment in the newly required way.** The experience was time consuming and cognitively stressful.

Ethics of AI services – toward trustworthy participants in society

Artificial intelligence (AI) has great potential to improve people's lives. AI has become such a pervasive and relevant actor in recent years that the ethics of AI has become a hot topic. Although we won't take a deep dive into that topic, we still want to acknowledge it and provide some food for thought.

Currently, there is a lot of discussion about the quality of the data AI algorithms use. From an ethics perspective, it is important to ensure that the data used to teach algorithms are not biased (see the Amazon example).

In addition, the question of how AI is applied and in what context is significant. A recent example is

deep fakes. In deep fakes, the AI creates artificial images or videos that are hard for people to recognise as fakes. These algorithms, such as Stable Diffusion are also applied, for example, to analyse human-created art, and based on the analysis, the AI creates its own art. The ethical question in this is who created the new art? Is it ethical to use human-created art without acknowledging or keeping the artist in the loop? With these kinds of so-called narrow AI examples, humans can serve as ethical agents related to data, algorithms, and their applications. Therefore, we see that careful ethical consideration and systematic monitoring is needed throughout the design process. In addition, fast responses are required in case

applications' effects turn out to be unintended in real-life contexts.

Furthermore, from the ethical perspective, **we see AI more as a collaborator with than a replacement for people. Therefore, we suggest designers make that collaboration as frictionless as possible.** When designed well, the user feels that the AI helps them achieve their goals. It is important for the user to feel like the AI acts on their behalf and not secretly against them. One needs trust that the AI is an agent and not a double agent working for some other stakeholder than the user. This state of mind, we believe, will help us create AI services that are trusted and liked participants in our society.

A way to fulfil the promise of digitalisation ethically



The next step in the evolution of user-centred design – ethical design

The basis of ethics is to promote good life in just societies and strive for it. How can we do this when creating digital services?

User-centred design relies on keeping the user at the centre and not letting technology dictate what choices the user should make. Participatory design invites users to design together with the designers, and empathic design requests to see the context and use of the product truly through the users' eyes and meet their needs.

Ethics hasn't changed, but the way we have brought it into design is new

We are not trying to change thousands of years of ethical theories. What we believe is new is the way we build ethical thinking and concrete ethical actions on top of human-centred design.

This new synthesis is a sum of several factors:

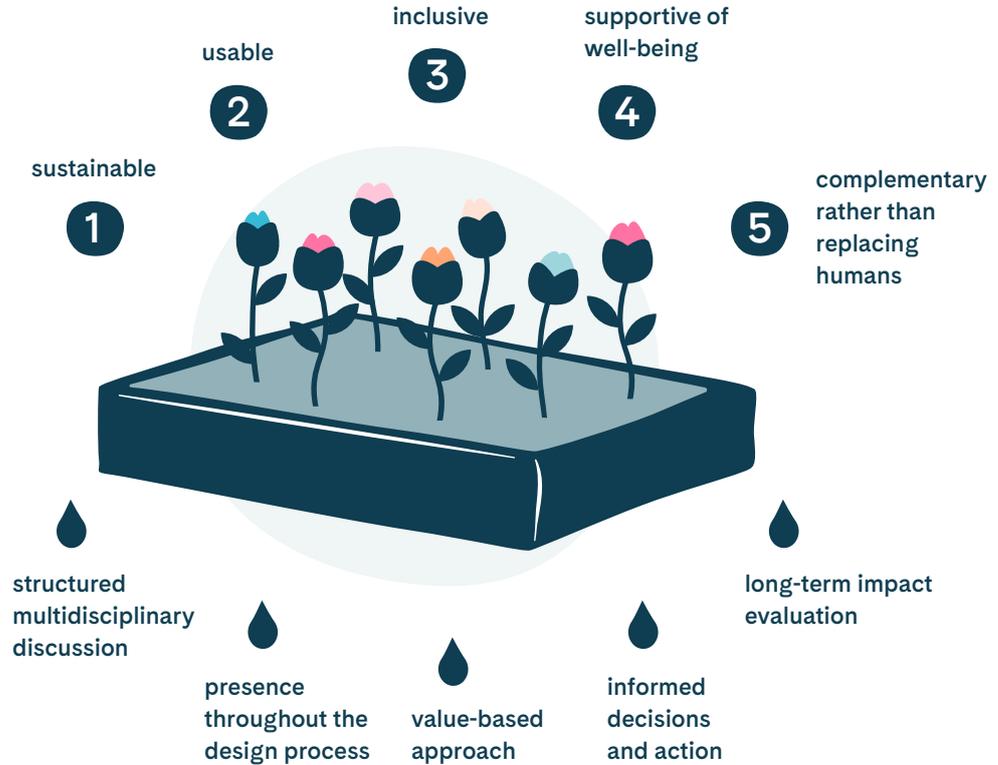
- Gofore's extensive experience with digitalisation and recognising what is lacking (especially for public sector)

- Review of ethical theories, research, and ethical design methods, and discussions with ethicists
- Understanding the shortcomings of human-centred design

Ethical design...

...produces
outcomes
that are

...requires





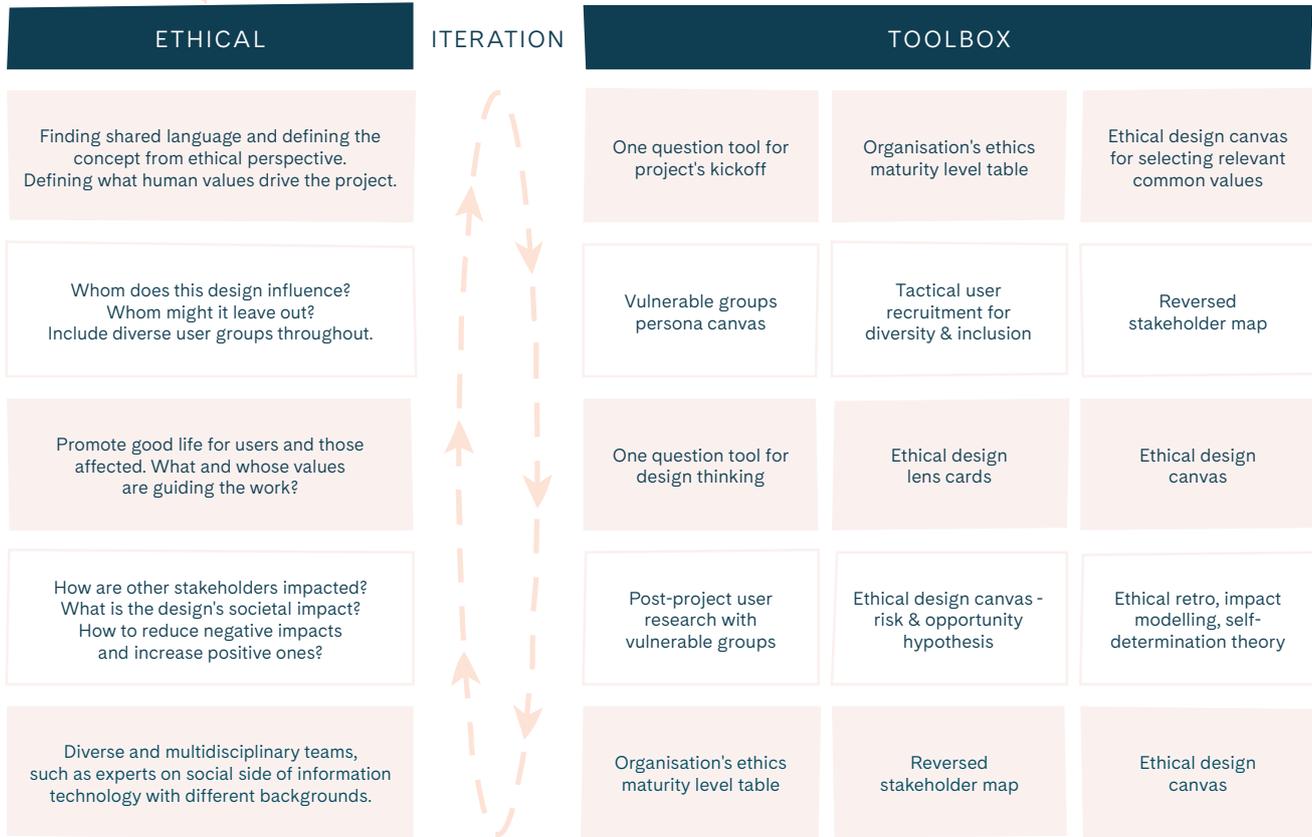
The basis of ethics is to promote good life in just societies and strive for it. How can we do this when creating digital services?

Project elements

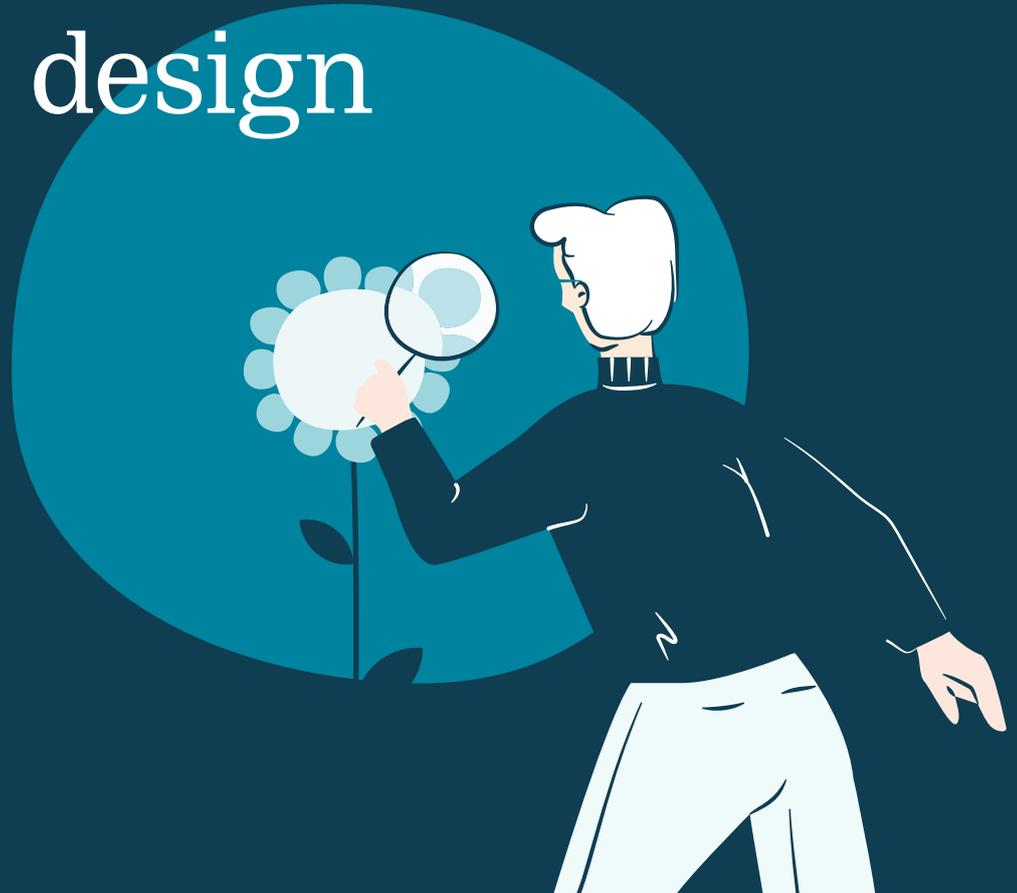
Here, we present some ethically critical elements of a typical design project, how they are done traditionally, and our new, ethical way of moving forward.

Ethical thinking evolves throughout the project. The beginning might involve a hypothesis about the project's ethical effects, but when we accumulate understanding, those effects might change. Ethical thinking and actions have to continue throughout the work. It is not enough to include them only in the project's kickoff.

PROJECT ELEMENTS	TRADITIONAL
CONCEPTUAL UNDERSTANDING, FINDING THE SHARED LANGUAGE	Technology, business goals, resource efficiency as primary drivers. Technology- and business-heavy language, lacking value discussions.
MAPPING STAKEHOLDERS & INVOLVING USERS	Who are the primary users and client organisation's primary stakeholders? Creating user profiles and personas of target groups
DESIGN & ITERATION	Human-centred process, user tests and validation with primary target groups.
IMPACT	What is the project's positive impact on primary users and the client organisation?
PROJECT GROUP	Internal stakeholders, technology, business and design experts.

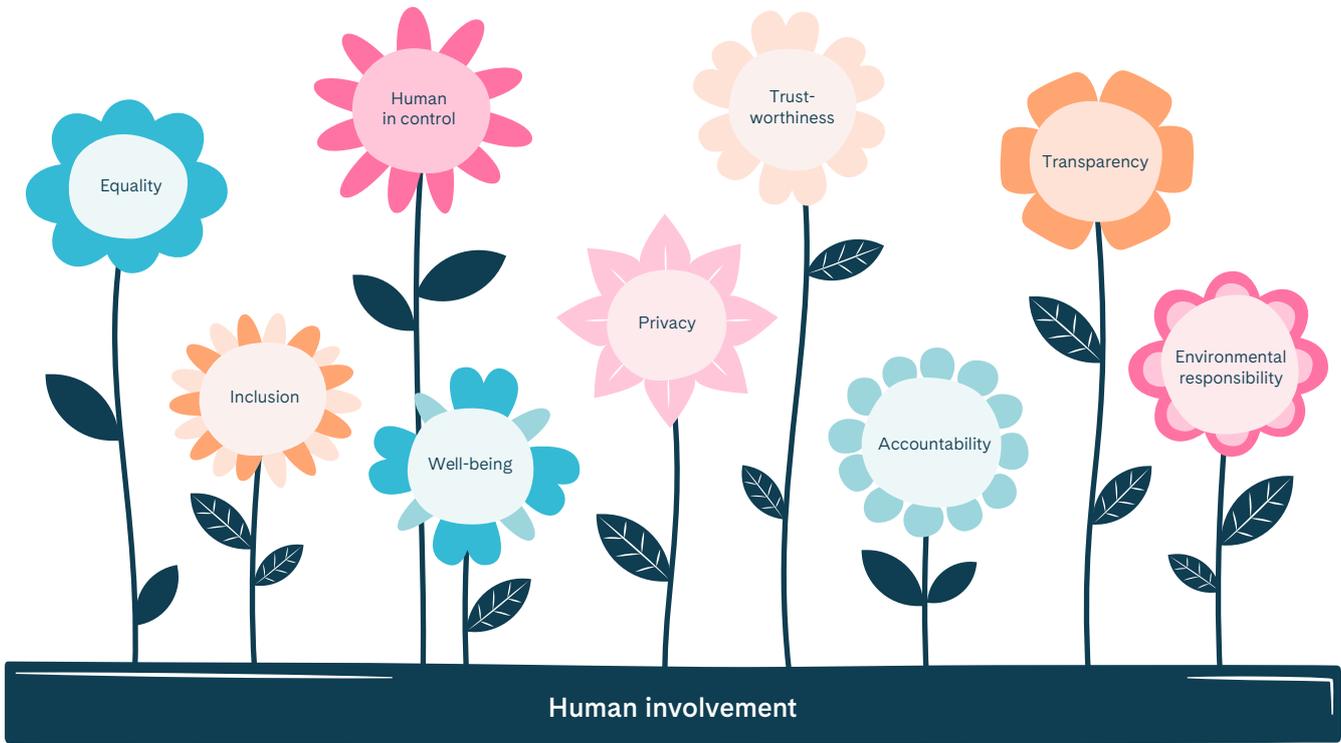


Ethical design lenses



We acknowledge that the social world is complex. Ethical lenses function as a starting point or a step toward ethical design and digitalisation. Each of these lenses can be used to inspire thinking about ethics from various perspectives. The lenses can help design stakeholders make choices that promote good life and address digitalisation's negative effects.

Remember that this is not a comprehensive list of all necessary elements to create ethical digitalisation. Some projects might involve other relevant aspects and values, so the list is not exclusive. In the exercises in which you use ethical design lenses, you can also add your own lenses that represent important values for the design project.



How we created these

1

Reviewed contemporary social issues and trends and their relation to digitalisation

2

Studied existing ethical design frameworks and design drivers

3

Conducted synthesis and analysis based on previous steps

4

Tested lenses in collaboration with DiversCity project to evaluate migrants' experiences with digital public services

(EU-funded project that Laurea University of Applied Sciences, Xamk University of Applied Sciences in Southeast Finland, and Registered Association Nicehearts Ry organised.)

5

Held a Gofore designer workshop to fine-tune lenses

FOUNDATION

Human involvement

Human-centricity and involvement remain at the core of design.

We drafted the following lenses to complement and extend the human-centred design approach.





Where to pay attention

Remind yourself about the essence of human-centred design and usability before starting the journey of ethical design.



1

LENS

Equality

Acknowledge the vast diversity in our lived realities. Everyone should be able to use and feel comfortable using the digital product or service regardless of their ethnicity, gender, sexual orientation, religion, origin, age, ability, or any other personal quality.



Where to pay attention

Be careful not to recreate existing inequalities in society. Make sure that the outcome reflects the most vulnerable groups' needs, too.



Examples

- The user interface (UI) and service, e.g. face recognition, should work with all skin colours.
- Provide more gender selection alternatives in the UI than male and female.
- Use language that is easy to understand for people from different backgrounds; use plain language.

2

LENS

Inclusion

Include and engage a variety of different people, including the most vulnerable in the **design process.**



Where to pay attention

Avoid assumptions and acknowledge how personal biases might affect the design process. Remember that you are not the user.



Examples

- Provide enough time and resources: earmark resources for including vulnerable groups.
- Strategically recruit for user research: think about who is in danger of being left behind.
- Make minorities' participation meaningful: make sure actually to use the data collected, even if the number of participants is small.
- Make different people's participation as comfortable as possible: tailor the approach based on the participants' needs.
- Look inward, use diverse design teams, and build an understanding of diversity, equity, and inclusion among the team.

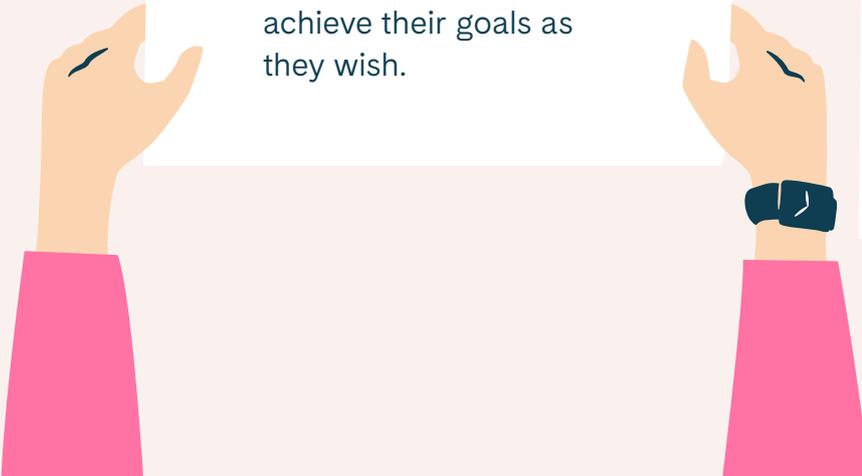


3

LENS

Human in control

The user should not feel that the service is controlling them and manoeuvring them towards unwanted or unknown goals.



Where to pay attention

Give the user control of the situation. Help them achieve their goals as they wish.

Examples

- Provide the ability to cancel, stop, or go back, unlike in some mobile applications in which the user must watch commercials with no ability to stop or exit them.
- Use persuasive design for good intentions and not, for example, to trick the user into buying more products.
- See automation and AI more as a collaborator and not a replacement for humans.

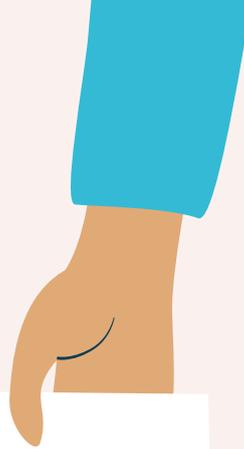
4

LENS

Well-being

Support users' social and psychological well-being. Emphasise people's feelings of competence, autonomy, and connection to others.





Where to pay attention

Avoid negative impacts such as burden for cognitive capabilities (e.g. memory, focus, creativity), digital addiction, biased and fake information, stress due to information overload and poor user interfaces, and cyberbullying.

Example

- SDT presents three psychological needs as the building blocks of well-being:

1. Competence:

feeling capable and effective

2. Autonomy:

feeling agency and acting in accordance with one's goals and values

3. Relatedness:

feeling connected to others and a sense of belonging

5

LENS

Privacy

Respect the user's right to privacy. Consider people's need to control their openness and closeness dynamically to others. Desires for interaction, such as the preferred degree of closeness, vary over time and across settings.



Where to pay attention

Acknowledge that people want to control their privacy outside the technology unless the technology supports their privacy needs.



Examples

- Some services, such as an organisation's internal chats, require agreed upon social norms of usage.
- Not everything that can be tracked should be tracked. If tracking helps the user, we should provide that option and explain for what the data is used.

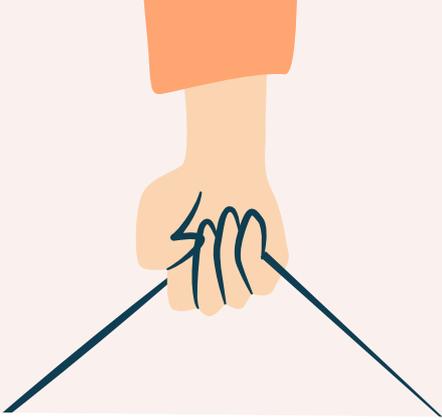


6

LENS

Trustworthiness

Do not design systems that work behind the user's back or against what they would deem as good.



Where to pay attention

Design a system that is motivated and can work in line with the user's personal goals. Make sure that the user data is safe and used responsibly.

Examples

- Does this design include something that is hidden so that the service's true aspiration is not openly shown or communicated? If so, what can be done to avoid this?
- Can this design be easily used to harm others? If so, what can be done to avoid this?

7

LENS

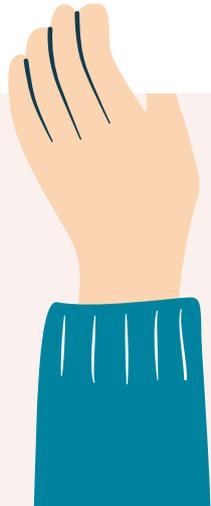
Accountability

It is all design stakeholders' responsibility to think about the process, outcome, and impact for individuals and society as a whole.



Where to pay attention

Be brave, raise the difficult questions, and spread awareness of ethical issues and shared responsibility. Remember that you should want to remain accountable for your designs in the long run.



Examples

- Study and assess your design's impact, not just in pre-launch user testing but also by evaluating user experience in real-life contexts after the launch.
- Talk with the product owner and project team: If something negative occurs with this service or product's use, is an action plan available to avoid negative impacts?

8

LENS

Transparency

Make sure that the user can make informed decisions and clearly see the consequences of the system's actions.



Where to pay attention

Inform the user about the logic of how the service works and makes decisions so that the user is better able to collaborate.



Examples

- Be transparent about data use, revealing also other reasons one's personal data is collected besides the main purpose(s).
- Give instructions on how to access one's data and how to avoid giving out any unnecessary data.



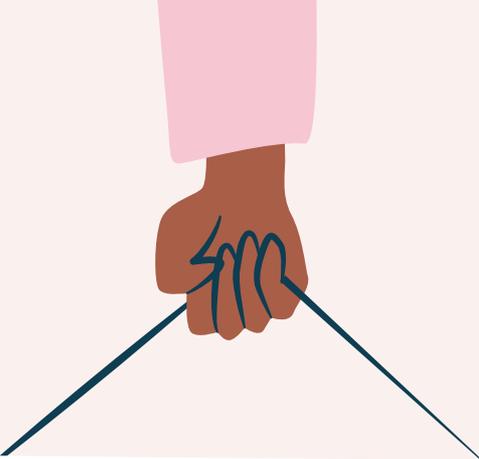
9

LENS

Environmental responsibility

The designed product should mind the planetary boundaries and not steer towards overconsumption.





Where to pay attention

Social sustainability solutions also have environmental implications. Sometimes environmental and social values are aligned, but sometimes they conflict. These situations require careful ethical consideration.

Examples

- Study and assess your design's environmental impact, e.g. how energy-efficiently your design runs in the system. Consider calculating the design's footprint and handprint.
- Design for environmental well-being; services, or products that nudge us towards sustainability.
- Allocate resources and recruit environmental experts, including external stakeholder groups and those for whom the design might have a negative impact.

Design tools for collective ethical capability



There is no shortage of ethical guidelines related to digital design and AI or digital technologies, more generally. Why, then, do many digital design processes not result in solutions that would truly promote good life in just societies?

We suggest that one of the missing links between ethical design principles, and ethical societal development is the lack of **ethical capability** in organisations. We develop all sorts of skills to cope with the requirements of working life. However, when it comes to ethically relevant decisions, we often lack words to describe the issues, analytical tools to sketch out the potential solutions, and perhaps sometimes the courage to act ethically. In contemporary organisations, knowledge and power are dispersed; therefore, it is more important now than ever that people in all work roles –

We suggest that one of the missing links between ethical design principles, and ethical societal development is the lack of ethical capability in organisations.

designers in particular – aim to grow in ethical capability. This goal will take us from principles to action.

There are several ways to build ethical capability. Here, **we present one focal path towards ethical capability: tools and methods that help systematically integrate ethics into design processes.** The tools are intended to facilitate creating shared ethical understanding and

actions. They are developed to help tie ethics into current design processes and eliminate the bias in power relations. In general, we see them as a supporting layer to help make informed decisions and consider the social impacts of the digitalisation we create.

Below, we introduce simple conversation starters and more intricate canvases and methods.

TOOL

The one question method

Use this one question method as a low threshold discussion starter. You can use it in project kickoffs or anywhere along the way in the design process. You can ask this question from yourself, from your colleagues or from your client. Dig deeper and mark down arguments: why? why not?

(as the core of ethics is
to pursue good life)

Does the design
promote good life
for it's users?



TOOL

Organisation's ethics maturity level table

Use this table to understand how to incorporate ethics into design projects based on the organisation's ethical maturity level. Get tips on what to do on different levels.

What is the maturity level of your organisation regarding ethics?

Never heard about ethics	Basic level and positive attitude	High awareness and pro sustainability
<p>Start the discussion with basic questions, start small.</p> <p>Example tools & questions:</p> <ul style="list-style-type: none">● Discuss why ethical design would be important in general and in this project● Look at the one question canvas: Does this design promote good life for it's users?● Introduce ethical design lens cards and use card sorting method to find which lenses resonate	<p>Find out what kind of internal goals or strategies exist that include ethics and sustainability.</p> <p>Example tools & questions:</p> <ul style="list-style-type: none">● Suggest your project as a case for actualising ethical design● Use the ethical lenses and card sorting task in the kickoff to find out what values are driving the project● Who are the users that are left out from target user groups? How are their needs taken into account?	<p>Think about the client as a companion in ethical conversation. Dig deeper and make them think, decide and justify.</p> <p>Example tools & questions:</p> <ul style="list-style-type: none">● Incorporate ethical KPI's that reflect the strategy● Set ethical values and targets to the project● Use the reversed stakeholder map and ethical design canvas

TOOL

Ethical lens cards

Depending on your or your organisation's experience with ethics, you can use these cards, for example, to become familiar with the ethical design lenses or to help prioritise the lenses in your organisation or project.

Example task

Prioritising

Use the cards to organise the lenses in order of importance. Do this exercise as a team.



Step 1

Organise the cards in order of importance. Discuss them with your team and take a photo of the cards.

Step 2

Start again and now organise the cards in order of how well they are realised in the project.

Step 3

If you notice that the most important lenses are not realised in the project, make an action plan to improve the situation. You can use the ethical design canvas to ideate.

Ethical lens cards

Foundation
Human
involvement



Equality



Inclusion



Human in
control



Well-being



Privacy



Trust-
worthiness



Accountability



Transparency



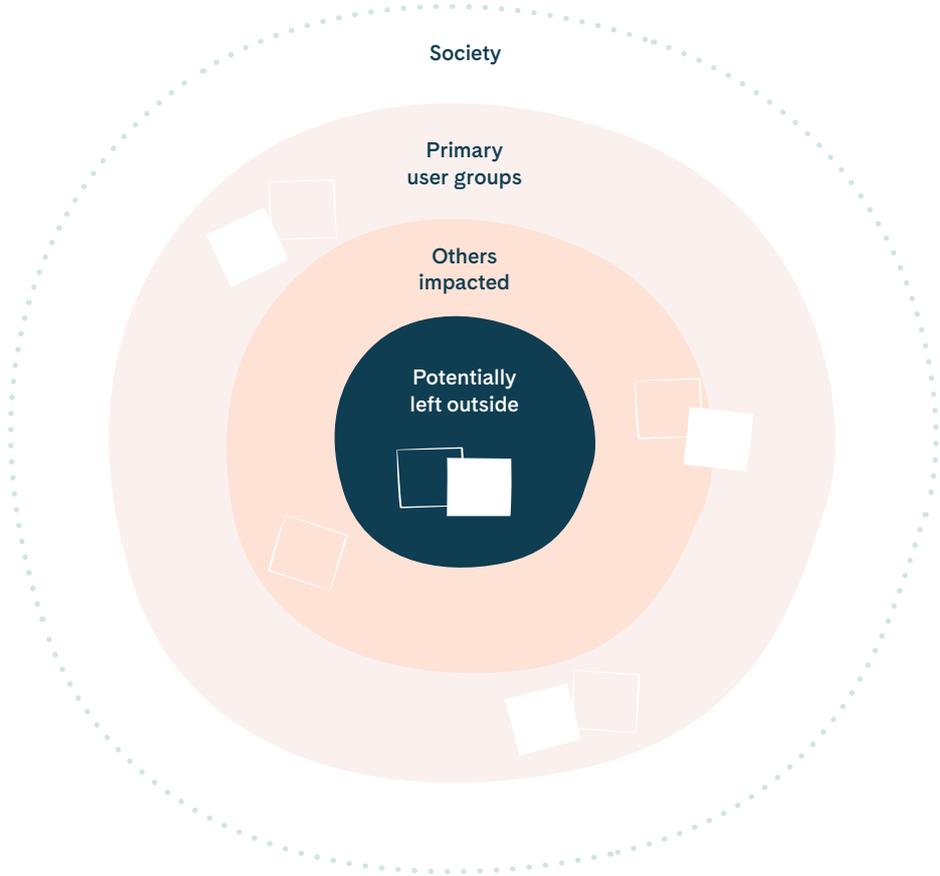
Environmental
responsibility



TOOL

Reversed stakeholder mapping

We have turned the standard stakeholder mapping upside down! Let's start by putting the most vulnerable in the centre and build around them. This version also brings the societal impact into consideration.



TOOL

Personas - Vulnerable groups

One way to ensure that you include the most vulnerable throughout is to create minority personas – in addition to other personas – to serve as visual reminders throughout the analysis and design phases. Make sure to use inclusive imagery in visualisations.

Minority personas	1 	2 	3 	4 
Risks				
Opportunities				
Goals				
Feelings				

Ethical Design Canvas

You can use the ethical design canvas at any stage of the project – before you have a concept, when you already have an idea, or if you want to audit an existing design.

Instructions

- 1. Reversed stakeholder mapping – noticing the vulnerable groups, mark them on the map**
- 2. Selecting the relevant lenses:**
 - Read through the ethical lens cards and think about what is ethically important in this project.
 - Individually select, for example, the three most important lenses.
 - Bring everyone's selected lenses together and decide as a team which ones you will select.
 - Think by yourself and then discuss how everyone understands these lenses and bring notes to the canvas (with sticky notes of various colours).
 - You should form a common understanding with your team about the meanings.
- 3. Impact hypothesis for vulnerable groups**
 - Think first about how each lens impacts these vulnerable groups. Consider the risks and opportunities and write them down on sticky notes.
 - Bring the sticky notes to the individual part in the canvas.
 - Repeat this same task, considering the organisational and societal levels.
 - See whether clusters emerge, and make an analysis of why and how
 - Repeat the above steps for primary groups and compare the resulting tensions and conflicts.
- 4. Based on the previous tasks, create a value proposition for the vulnerable groups.**
- 5. Decide on and write down activities to address these possible risks and opportunities in your project work.**

Ethical Design Canvas

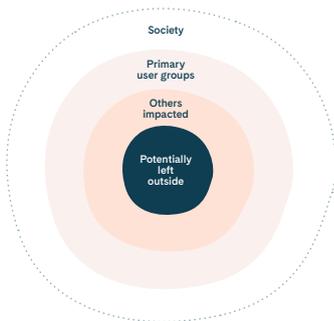
Instructions

1. Fill in stakeholder map
2. Select relevant lenses
3. Discuss meaning of lenses for different ethical players in the project
4. Impact hypothesis; Write down impact on individuals and society, risks and opportunities
5. Create value proposition for vulnerable groups
6. Make an action plan

Ethical lenses

- | | |
|---------------------|---------------------------------|
| 1. Equality | 7. Responsibility |
| 2. Inclusion | 8. Transparency |
| 3. Human in control | 9. Environmental sustainability |
| 4. Well-being | 10. ...your own? |
| 5. Privacy | |
| 6. Trustworthiness | |

Reversed stakeholder map



Selected lenses

What is the meaning of these lenses for each group internally (designer, business dev., management)? Let's form a common understanding.



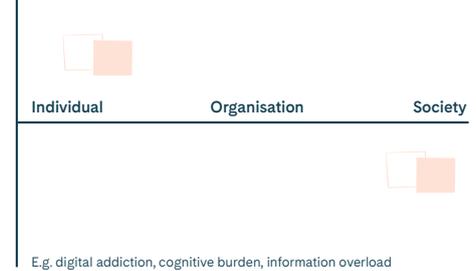
Vulnerable groups impact hypothesis

Step 1: What are the hypothetical risks and opportunities for vulnerable groups? What kind of effects does this have for the individual level and for the surrounding society? Write down each group in one colour.

Step 2: Now do the same for primary groups and see the difference. Mark up tensions and conflicts.

Opportunities

E.g. meaningful social connections, self-actualisation, sharing knowledge



E.g. digital addiction, cognitive burden, information overload

Risks

Value proposition for vulnerable groups

Think about the vulnerable groups in your reversed stakeholder map, their risks and opportunities. What is the value proposition for these groups?

Solution proposal (high-level):

Actions:

User research activities:

Design activities:

Development activities:

Management / business development activities:

Ethics timeline - an evaluation tool for retro meetings

This tool will help to conduct collective ethical evaluation of an ending or ongoing design process. Ethical reflection helps grow the ethical capability of the project team. Invite all design stakeholders to the retro meeting.



Instructions:

- 1. Draw a timeline describing the project. Add focal events to the timeline, e.g. kickoff, user interviews, launching of the service etc.**
- 2. Each participant gets sticky notes in three different colours. Ponder three different themes on the different colours.**
- 3. Themes for sticky notes:**
 - a. THEME 1, THE ETHICAL QUESTIONS:**
What kind of ethical questions surfaced in different phases of

the project? You can also add ethical questions that were not identified during the process but that now seem relevant.

- b. THEME 2, ACTIONS AND SOLUTIONS:**
What kind of solutions were found to the ethical questions? What kind of actions were taken?
- c. THEME 3, IMPACTS:**
What kind of impacts did the ethical questions and solutions have? How did they surface?

4. Add sticky notes on the timeline.

5. Conversation: each participant tells about their observations and reflections.

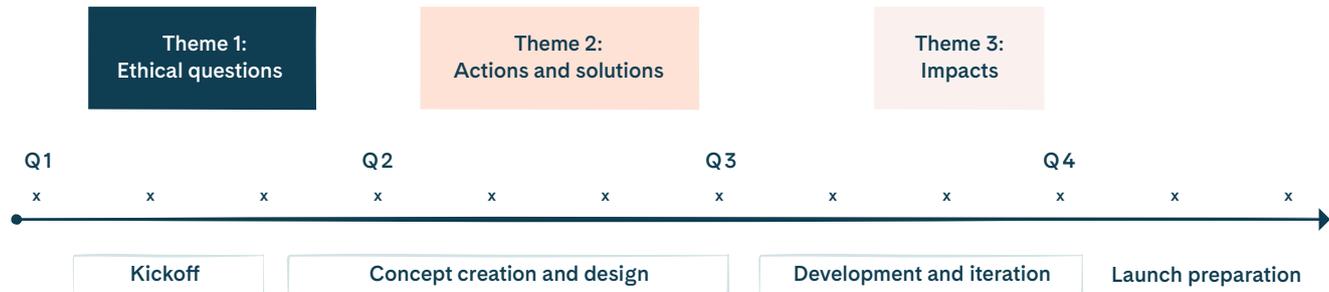
6. Understanding: make sense of the observations together, using these questions:

- a. Are there clusters on the timeline? Do some phases appear particularly relevant from the ethical perspective?
- b. Does some theme stand out? For example, are there more ethical questions than solutions?

7. Reflect on any important aspects, for example:

- a. What would help you in the future, in similar processes, to integrate both aspects – ethical risks and opportunities for ethical impact – to your work?
- b. What did you learn in this process? How will you apply these learnings in the future?

Ethics timeline



Literature and inspiration

Books and journal articles

- Bowles, Cennydd. Future Ethics, 2018.
- Deci, Edward & Ryan, Richard. The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior, 2000.
- Friedman, Batya, and David G. Hendry. Value Sensitive Design, 2019.
- Holmes, Kat. Mismatch, 2020.
- Seely, John, and Paul Duguid. The Social Life of Information, 2000.
- Spiekermann, Sarah. Ethical IT Innovation, 2015.

Web pages and projects

- "Digital Design Ethics - 10 Universal Principles." Digital Design Ethics.
- "Society Centred Design." Society Centred Design.
- "The Ethics of Design: 5 Ways to Ensure You 'Do No Harm.'" The Akendi Blog.
- "The Future of Well-Being in a Tech-Saturated World" Pew Research Center: Internet, Science & Tech.
- "VIRT-EU – Values and Ethics in Responsible Design in Europe." Horizon 2020 Program.
- Gofore Code of Ethics.



Acknowledgements

Special thanks to

Anna Seppänen, ethicist and CEO of CoHumans:

Thank you, Anna, for your editorial guidance and professional ethical viewpoint and for crystallising ethical definitions in this booklet.

Kristiina Härkönen, chief sustainability officer:

Thank you, Kristiina, for spearheading ethical-capability building and raising awareness of sustainability at Gofore.

Kaisa Alapartanen:

Thank you, Kaisa, for valuable subediting.

Gofore design community:

For participating in our ethical design workshops, keeping discussions alive, providing your real-life examples, reviewing this booklet, and giving us valuable suggestions.

Gofore culture:

For truly being the pioneers of the ethical digital world, putting effort into increasing our organisation's ethical capability, and encouraging us in this writing journey.



GLOSSARY FROM CODE OF ETHICS

This glossary is a slightly revised version from the Gofore Code of Ethics.

Ethics

Ethics – as understood in this document – concerns the fundamentals of good life. It expresses what is valuable and therefore orients our lives. The history of ethics, of course, includes many well-argued views about what constitutes the ethical aim of life. This multitude invites us all to reflect on our values and aims. In business contexts, ethics entails, for instance, the relationship between business and societal aims.

Ethical agency

“Ethical agency” refers to one’s ability to assess and orient their behaviour in relation to ethical aims. It entails engaging in critical reflection on the ethically relevant consequences of one’s actions: do I promote good and avoid harm? In organisations, ethical agency entails that each individual’s ethical behaviour contributes to the organisation’s wider ethical value.

Societal impact

“Societal impact” here refers to the societal changes that would not have happened without digitalisation. The Impact, therefore, is associated with all stakeholders utilising digitalisation whereas projects’ outcomes or outputs are associated with the producers of digitalisation. In some cases, societal impact can be measured numerically, but sometimes it is better to rely on qualitative evaluation. Nevertheless, the assessment of societal impact requires a “theory of change”. It roughly refers to an idea of how digitalisation activities translate to changes in society.

Sustainability

“Sustainability” evokes an image of long duration and therefore challenges us to ponder not only the short-term but also long-term consequences of our actions. Sustainability has often been associated with environmental responsibility, but it applies to social responsibility, as well. In fact, here, we focus on social sustainability, meaning the parts of sustainability that relate to people.

WE PRESENT:

Thinking

- Our approach toward socially sustainable digitalisation.
- A reminder that people play an active role in steering technologies in directions they consider valuable for society.
- The need for social innovations in addition to technological ones.

Tools

- Ethical design lenses to guide design systematically in an ethical direction
- Canvases to steer design in an ethical direction and make informed decisions related to socially sustainable digitalisation

If you want to start a discussion on ethical digitalisation, take the next step and contact us:

design@gofore.com

We hope you
find the booklet
inspiring and
useful!